

Reorganizing Public Access to Property Information by Remodelling and Standardization

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(1) Outline

- (2) Property information in Denmark
- (3) Official strategy for e-governance from 2000
- (4) Logical datamodel for property data
- (5) National project on e-government from 2001
- (6) Acces to all data through same user-interface
- (7) XML and Digital Signature
- (8) Beginning e-land administration
- (9) Steps to be followed

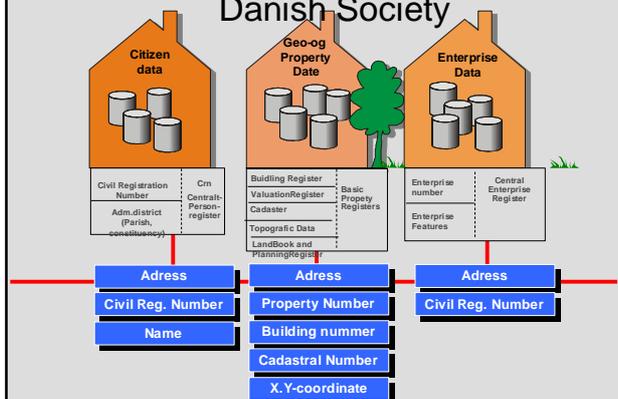
What is e-Landadmininstration

- "E-" has been used in Land Administration since the late 60'ties.
- But the NEW wave with "E-" is focus on
 - **Interoperability**: Others than producers use the dataset for their own and many different purposes. Massmarket, operational and strategic purposes, R&D
 - Focus on the citizens: **Easy acces to see "their data" and communicate** with public bodies in easy ways. One-stop communciation

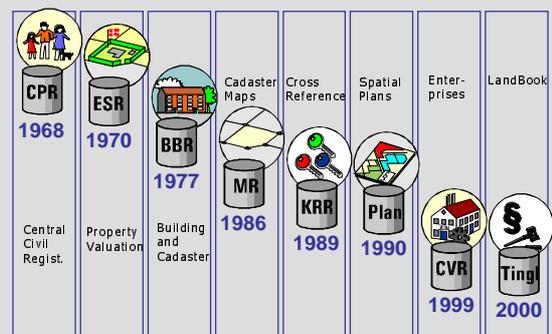
(2) Property Information in .dk

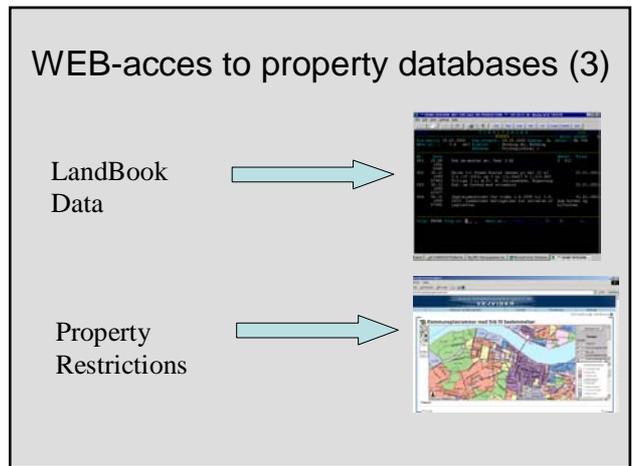
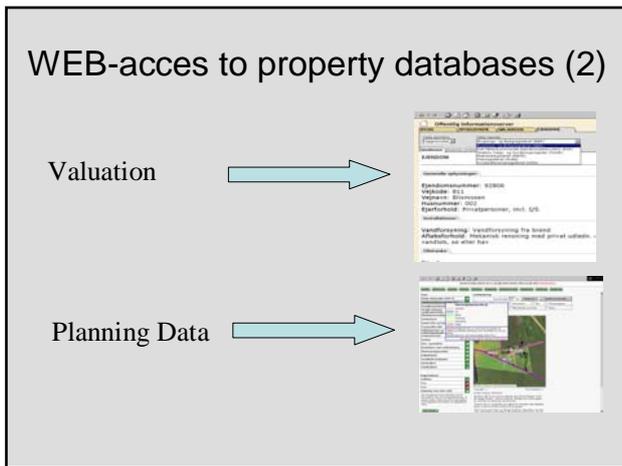
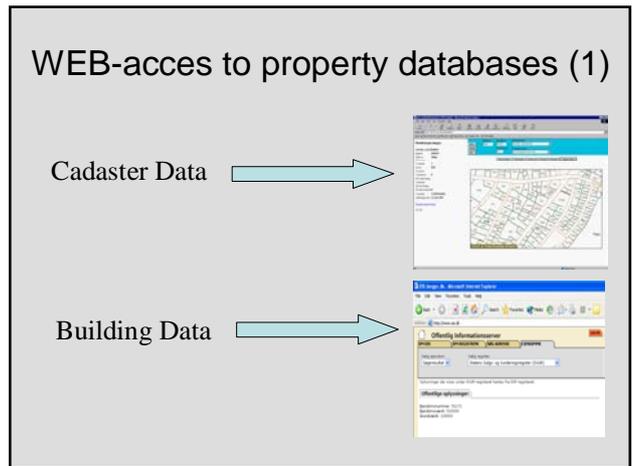
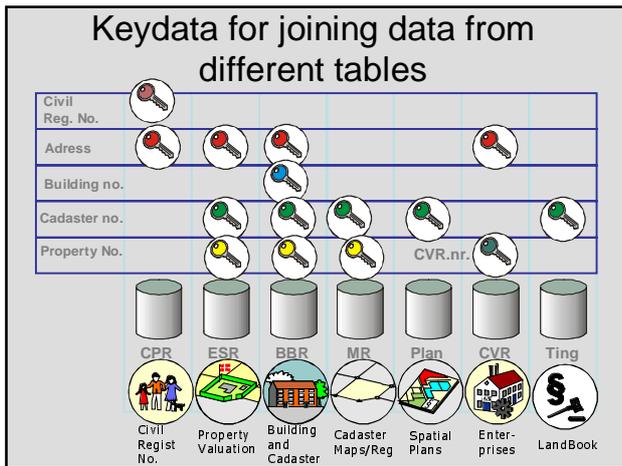
- Tradition for unique identifacation of individuals, properties and enterprises for different purposes:
- Social Service, Income Taxation, Land Administration and Management, Property Taxation and Enterprise Taxation

Three Different Data Domaines in Danish Society

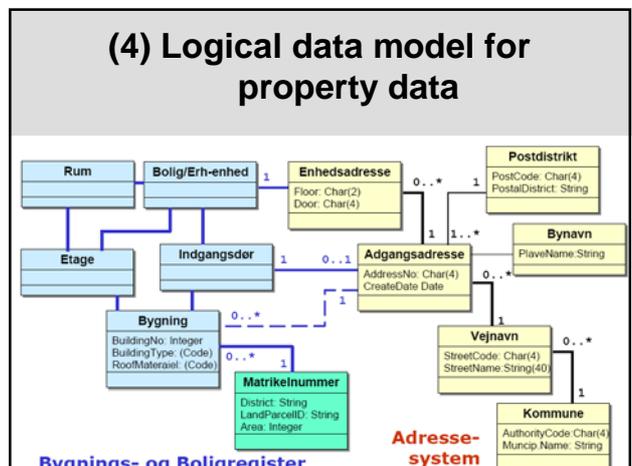


The history of digitalisation om central Register Domaines





- ### (3) The official strategy for e-governance starts in 2000
- An overall strategy for the **development of the information society**.
 - The public sector should be actively involved with the private one and **be the leading force in the efficient use** of information technology.
 - Public administration at both the central and the local level must be connected by an electronic service network.
 - The establishment of such a service network means **that information which has already been given to one public institution by citizens or companies should not be requested by another agency**.
 - For citizens and companies it should be possible to **send** letters and information to public authorities by electronic means - and **receive answers** the same way.
 - Public institutions shall put an end to paper-based files



(5) National project on e-government from 2001

- Real focus on more effective services. Development ICT-project has to lead to reduction on tax-paid cost.
- Based on open-standards like XML, GML.
- A cross-governmental body organised to approve standards for using xml to describe objects
- Furthermore the section of geoinformation has to::
 - develop and formulate a vision and a strategic framework for development of geodata – including property information - in DK
 - secure co-operation on data, access to data modelling, etc.
 - to promote development of geodata services for many different public and commercial services.

(6) Citizen's access to all data through the same interface

- An Internet access shall give the citizens access to all publicly registered information on themselves, to a tailored information system as well as easy, fast and secure self-service.
- The individual citizen is offered a complete access to precisely the public information and services that are relevant to her through a personal Internet access to the public authorities.
- Here she can get access to the information registered about her by the public authorities – and possibility of following own present cases – by means of a digital signature.
- The citizen must have the possibility of tailoring her personal Internet access so that exactly the public information and news, in which she is interested, is presented first.
- The personal access to the public authorities must also give access to self-service by means of electronic forms.

Public Informations Server

- Under the auspices of the Ministry of Commerce and Financial Affairs a work has been in progress about developing and implementing an "Offentlig InformationsServer (OIS)" (a public information server). The concept around OIS has to give potential users – citizens, enterprises and public authorities – the possibility of collecting data from the public data collections, including property data, through the Internet.
- Through the public information server users and citizens are offered:
 - access to own data
 - access to surveys, statistics, etc.
 - possibility of data selection for distribution purposes
 - possibility of submission of applications, notifications, etc. for public authorities.

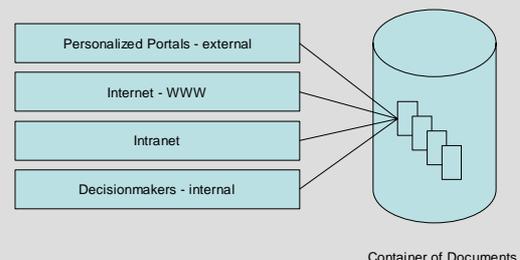
Implementaton of PI-Server

- *Phase 1* which includes the elaboration of a specification of requirements, supply and technical development as well as implementation of the server will comprise data from the BBR, the ESR, the Planning Register, the Cadastral Register, the Cross Reference Register and the National Sales and Valuation Register.
- *Phase 2* will offer the possibility of transfer of data – via the information server – from the public data collections to enterprises who wish to set up as data distributors.
- *Phase 3* will open for further development of the server with a view to offer further services to the users. *Subsequent phases* where property data from other sources will be available are planned. The next focus will be on spatial legal planning documents and data from the Land Book (Ministry of Justice).
- The concept of this public information server is most topical in Denmark. Such "portal models" are expected to get great influence on the development of the digital administration of the public sector.

The idea behind the Public Information Server

- The overall idea is to create the common IT-infrastructure for the whole public sector so citizens, civil servants and enterprises can query through the same user-interface rto different sectors after information.

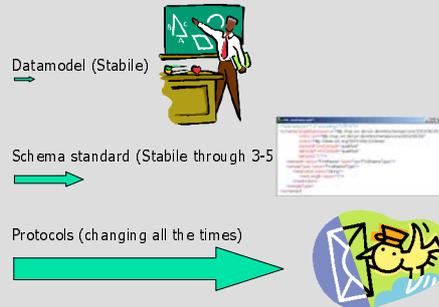
Public Information Server



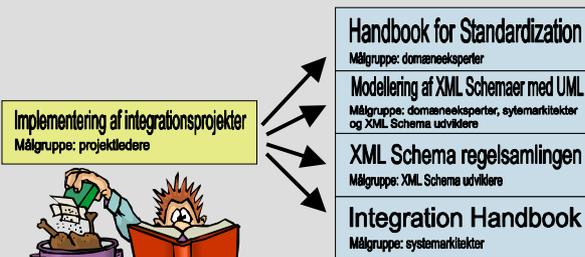
(7) XML and digital signature

- The Danish Strategy for e-administration also includes an organization to promote knowledge sharing for organizations and individuals involved.
- The strategy is to improve the public sector and deliver better services to the citizens.
- Another prerequisite is that all citizens in Denmark are to be ensured the option of a digital signature.
- To achieve this, a committee on electronic government was constituted in the autumn of 2001 under the Ministry of Finance.
- The work of the committee has thus so far resulted in two initiatives:
- **One to ensure the implementation of XML as the communication standard in the public sector and another to ensure the option of a digital signature.**
- Furthermore an ongoing task regarding standards for metadata.
- For involving the Geoinformation data a further standard GML for describing the spatial objects has been chosen.

Standardization in a changing world



Tools: "The 5 cookbooks"



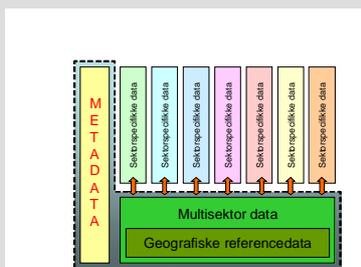
<http://www.oio.dk/XML/CookBooks>

Public Information Online: XML: A common datamodel

- Central types, elements og valuelists
- Comprehensive schemas
- Snitflader mellem systemer
- Namespaces / public comitee for types and elements under Jurisdiction of Ministry of Finance
- **A new language for managers**

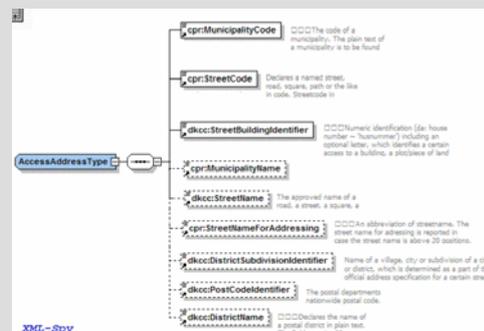


A new logical data model for property data is underway



Actual work is related to European Standization initiatives like INSPIRE

Standardization in XML-schemes



(8) Beginning e-land administration

Many new self-service systems is developed.

- (In-cometax, consume-tax, carcontrol exist)

In **E-Land Administration**:

- Application for permission **to change landuse**
- Application for **farmers subsidy**
- Application **building-permission**
- Application for **digging raw materials**

(9) Steps to be followed

- Principles like for example use of 3D models to illustrate spatial consequences of new projects – both in rural and urban areas.
- The legal basis for and the construction of the administrative routines behind these property data systems will undergo alterations in consequence of the IT development. Today the many organizational-administrative changes, which the new systems will permit and catalyze, have not been tackled at all. This will take place as a necessary consequence of the strong focus of the Danish government on digital management.
- In continuation of the development towards digital management we will see an increased co-operation between public authorities and this will break up the traditional boundaries between existing ministerial spheres, for example the ministries of commerce, justice, environment and agriculture in Denmark.
- In this way we are professionally facing quite new co-operation concepts around the entire knowledge field which internationally is described as *Spatial Information Management*.